



Intermontanus

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NEWS & ANNOUNCEMENTS

DESERT TORTOISE WINS RACE FOR UTAH'S PARADISE CANYON

By Jim Woolf

Reprinted from the Salt Lake Tribune, Friday March 26, 1993.

St. George - Paradise Canyon is a red-rock gulch that winds through the low cliffs forming the northern boundary of this fast-growing community.

Developers lust for this land. They envision luxury homes lining lush green fairways of a golf course Arnold Palmer already has designed.

But Paradise Canyon already is home to 400 desert tortoises, a rare reptile protected since 1989 by the Federal Endangered Species Act.

Biologists from the U.S. Fish and Wildlife Service announced Thursday that protection of tortoises is more important than development, and Paradise Canyon and several other prime parcels of real estate should be included in a proposed desert tortoise preserve.

Leaving Paradise canyon out of the preserve would be like "removing the heart from the tortoise," said Bob Williams, state director for the Fish and Wildlife Service, during a meeting here.

Robert Benton, a Fish and Wildlife biologist, said there is no need for development in areas already occupied by large numbers of tortoises. The county's growth can be accommodated by expansion into farm lands along the Virgin River.

The decision was a frustrating set back for the citizens committee that has been working more than two years to devise a plan that would both protect the tortoise and allow limited development in the foothills north of St. George.

Ivins Mayor Christopher Blake, a committee member, said the planning process appears to have been a "waste of time."

It is illegal to kill an endangered species or destroy its habitat. However, the committee was hoping to take advantage of a special provision of the Endangered Species Act that allows the destruction of some animals and habitat if enough other land has been protected to guarantee the long-term survival of the species.

The committee had proposed a 56-square-mile desert tortoise preserve that included some of the best tortoise habitat in the St. George area. However, it deleted Paradise Canyon and a few other areas sought by developers. The county promised \$7 million to help finance the preserve.

The compromise was unacceptable, the federal biologists said Thursday. They contend the only way to guarantee survival of the tortoise is to protect all of the high-quality habitat that remains in a large block of land north of the city.

If the entire parcel is placed in a preserve, Fish and Wildlife will allow development to proceed in a few outlying areas where fewer tortoises live.

Russell Gallian, a Washington County Commissioner, said the cost of Fish and Wildlife's proposal far exceeds any benefit the

county would receive. "There isn't any incentive for us to participate."

Ron Thompson, manager of the Washington County Water Conservancy District, said exclusion of Paradise Canyon was the "linchpin" in a shaky compromise that allowed the committee to endorse the preserve idea.

Prohibiting development in the canyon will force reconsideration of the entire proposal, he said.

Jim Doyle, a St. George developer, estimated the value of private land in Paradise Canyon and other areas Fish and Wildlife wants included in the preserve at \$100 million. He asked where the federal government is going to find enough money to purchase all this land.

The federal Land and Water and Conservation Fund is one option, said Robert Jacobsen, assistant regional director for Fish and Wildlife. He also said the BLM may be persuaded to enter into trades with some of the private landowners in the proposed preserve.

Although committee members were unhappy with the decision on Paradise Canyon, they agreed to continue studying the preserve idea.

Fish and Wildlife's announcement came a week after members of Utah's congressional delegation met with U.S. Secretary of Interior Bruce Babbitt to persuade him to accept the committee's plan.

Mary Jane Collipriest, spokeswoman for Sen. Robert Bennett, said the senator still hopes for a compromise. "Naturally, it's discouraging to hear an adverse decision might be coming, but until the final decision is announced, he's hopeful the issue can be resolved."

STATUS OF THE SPOTTED FROG, *RANA PRETIOSA*

The Fish and Wildlife Service announced that the spotted frog deserves federal protection but the agency is unable to list the species at this time. The spotted frog has been declining throughout much of its range, including Utah. In 1990 the Utah Division of Wildlife Resources (UDWR) began monitoring populations of the frog in the Wasatch Mountains. Based on one year's data and some questionable methods of surveying and population estimates, the UDWR estimated that fewer than 500 spotted frogs live in the area monitored.

Undoubtedly, the primary reason for the decline in Utah is habitat destruction. The frogs once lived in wetlands throughout the Wasatch Mountain area, but as cities expanded the wetlands were drained. In other areas dams have/are being built which flood the frogs' habitat. Other causes of the decline may be the introduction non-native fish and pollution.

I have heard that someone is proposing to divide the species. Pacific Northwest populations will remain as *Rana pretiosa* while the other populations will become *Rana luteiventris*. Another study indicates that the west desert populations are genetically distinct from the Wasatch populations. It appears the current *Rana pretiosa* may actually be a complex of morphologically similar species. If anyone has more information about the taxonomic status of these frogs, please let me know. I'll write more as the story unfolds.

MONGOOSE ATTACKS TEEN'S SNAKESKIN BOOTS!

By Joe Berger

Reprinted from the Weekly World News March 2, 1993

Fancy-pants playboy Harry Keen saved for seven months to buy a pair of \$1600 cobra-skin cowboy boots - then watched in horror as a hopping mad mongoose ripped his ritzy boots to shreds!

The ruthless mongoose named Mort attacked the boots the instant happy-go-lucky Harry strutted into a pal's pet shop to show off the hand-tooled boots he'd bought just minutes before.

"Mongooses are ferocious snake eaters, so when Mort saw my boots, he must've figured lunch was served," groaned the heart sick candy store clerk.

"He's usually an easygoing little guy, but he came at me so fast I didn't have a chance to fight him off - and the next thing I knew, he'd torn my boots to bits. I was lucky to get away with all my toes."

The flabbergasted bachelor's tale of woe began when he spotted the snazzy snake-skin boots in the window of a Hong Kong clothing store.

"The minute I saw those things, I knew I had to have them," recalled dapper Harry, 19. "When I found out they cost \$1600, I made up my mind to scrimp and save until I could buy them. And I was so excited the day I waltzed into that store and slipped those things on."

Harry headed straight for buddy Kenneth Lok's pet store to give him a gander at his grandiose footwear. That's when the mongoose attacked.

"I took the boots back to the store and asked the guy for my money back, but he just laughed at me," said the rattled teen. "He said only an idiot shows off a pair of \$1600 snake-skin boots to a mongoose."

KANSAS HERPETOLOGICAL SOCIETY WANTS YOUR HELP TO STOP RATTLESNAKE ROUNDUPS

The Kansas Herpetological Society would like you to boycott Sharon Springs and Colby, Kansas. Sharon Springs is the home of a rattlesnake roundup and Colby is the residence of the legislator who sponsored the "Rattlesnake Bill" which legalized the roundup.

Obviously in order for us to have an impact on two towns that most of us have never been to, we must write the Chambers of Commerce and let them know we are boycotting them. If you've ever wanted to help stop the meaningless killing of reptiles, this is an opportunity to do just that. Please take five minutes and write these towns: Sharon Springs Chamber of Commerce, Sharon Springs, Kansas 67758; and Colby Chamber of Commerce, Colby, Kansas 67701. Letter writers should indicate that they will do no business in either city until the rattlesnake roundup ceases to exist in its present form and the rattlesnake hunting law is eliminated.

Utah Association of Herpetologists

Intermontanus

Editor: Breck Bartholomew

Assistant Editor: Cynthia Lleyson

Membership: \$7.00/year; Includes six issues of *Intermontanus* and participation in all UTAH activities.

Send correspondence to UTAH,
195 West 200 North, 84321-3905
(801) 752-0297.

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NEW PUBLICATIONS

SSAR announces a facsimile reprint of the herpetological classic **The Gila Monster and Its Allies** by Charles M. Bogert and Rafael Martín del Campo with a new preface by Bogert and a retrospective essay by Daniel Beck.

This monograph, first published in 1956, is still the only comprehensive treatment of the genus *Heloderma*. The book covers all aspects of the animal's biology and venomology.

The book will be published in August, 1993. The cost is \$30 for SSAR members, prior to August 1, and \$38 to non-members (add \$2 for postage).

SSAR is also selling **Herpetology: Current Research on the Biology of Amphibians and Reptiles**. This new book contains the updated plenary lectures from the First World Congress of Herpetology. These chapters, by leading authorities on amphibians and reptiles, present a broad review of contemporary herpetology and are an excellent collection of readings for herpetology courses and graduate students. The book is extensively illustrated. The price is \$28 + \$2 postage.

Order either book from Robert D. Aldridge, SSAR Publications Secretary, Department of Biology, St. Louis University, St. Louis, Missouri 63103.

The Kansas Herpetological Society announces the publication of a new Edward H. Taylor limited edition volume. Entitled **The Lizards of Kansas**, this volume is the Masters thesis that Dr. Taylor submitted to the University of Kansas in 1916 upon his return from the Philippines.

This softbound volume with illustrations (limited to 400 copies) is available for only \$10.00 postpaid. Send orders to Karen Toepfer, KHS Secretary/Treasurer, 303 West 39th Street, Hays, Kansas 67601. Please send checks or money orders only made out to "Kansas Herpetological Society."

The International Herpetological Symposium, Inc., announces the publication of **Herpetological Natural History**, a peer-reviewed journal devoted to all aspects of natural history of amphibians and reptiles.

The editorial staff of *Herpetological Natural History* seeks original manuscripts that provide new theoretical and/or empirical insights within the broad topics of behavior, ecology, evolution, and life history. Both field and laboratory studies will be considered. Papers will be published as either feature articles or notes. A book review section will appear in forthcoming issues.

Herpetological Natural History initially will be published semi-annually. Authors should expect accepted papers to be published within 6 to 12 months.

Manuscripts and requests for information should be directed to: Gordon W. Schuett, General Editor, *Herpetological Natural History*, Department of Zoology & Physiology, University of Wyoming, Laramie, WY 82071.

Subscription to *Herpetological Natural History* is \$20.00/yr. International surface postage included; air mail quotes provided upon request.

Payment, by check or money order in U.S. dollars, should be made out to *International Herpetological Symposium, Inc.*, and directed to: David Hulmes, Treasurer, International Herpetological Symposium, Inc., 361 Van Winkle Avenue, Hawthorne, NJ 07506.

Reptile & Amphibian Magazine recently published **The 1993-4 Directory: A Guide to North American Herpetology**. The directory contains addresses for over 2,000 herpetological: societies, zoos, dealers, breeders, supply houses, equipment manufacturers, and many more herp related businesses. The directory costs \$15.00 + \$1.50 postage & handling. Send payment to: *Reptile & Amphibian Magazine*, RD 3, Box 3709-A, Pottsville, PA 17901.

HERP SUPPLY OFFERS

We have received offers to purchase Nutri Grow Iguana Diet and Prohook snake hooks and sexing probes. The Iguana Diet contains 25% protein (min), 18% fiber (max), 1.76 % fat (min), and added vitamins and minerals, including vitamin D3 to aid in calcium absorption. If enough people are interested in purchasing this product we can get a discount price. The snake hooks and sexing probes look well made and are reasonably priced. Let me know if you are interested in these items or want more information.

ANOTHER HERPETOLOGICAL COMPUTER BULLETIN BOARD

The Ophidian Herpetological Network is a new computer bulletin board. Open 24-hours daily, 300-2400 BPS, 8+N+1; (602) 468-9860.

FEATURES

SPRING, LIZARDS, AND TICKS

Persons collecting lizards, particularly *Sceloporus*, in early to late spring should be aware that they can be hosts for larva and nymphs of the *Ixodes pacificus* tick. This tick has been associated with *Borrelia burgdorferi*, the spirochete causing Lyme Disease. Although only one focus population of the tick is documented in Washington County, Utah, it is very likely that other populations exist that remain to be confirmed.

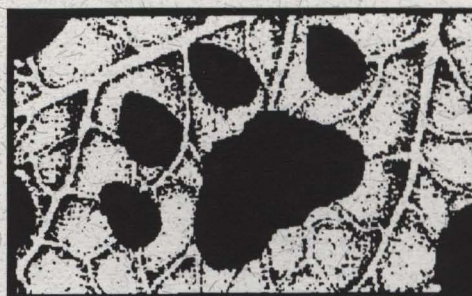
The tick is typically found on lizard hosts in spring, moving to small mammals in late spring and finally to large mammals (deer or humans) in the fall. *Ixodes* have a harder body than most mites found on lizards and the early stage has six legs rather than the eight found in adults. When removed from the lizard, the tick actively searches for a new host. Motion seems to be the cue whether the intended host is a lizard, dog or human. This could be a concern if ticks in Utah are carrying Lyme Disease. It would be much more agreeable to confirm the presence of *B. burgdorferi* in the ticks rather than humans of the herpetological persuasion. Always check specimens from the wild for external parasites. No-Pest Strips still seem to be the best method for controlling infestations.

Although small, the ticks can be seen without magnification and are much larger than the red Trombiculid mites commonly found in animals from the wild. The ear openings are the most frequently infested site. Attachment to the host is through the tympanum, a high infestation can rupture the tissue and ticks will be found occupying the internal area. Other areas to examine are gular folds and axillary regions. Lizards with large mucronate scales, such as *Sceloporus magister*, can have ticks lodged under the scales that may or may not be noticeable by a raised edge.

Ticks can be removed with tweezers by grasping the tick's abdomen and pulling, the mouth-parts will usually come free. Care should be taken not to squirt the tick out of the tweezers to parts unknown; they can shoot out much like a watermelon seed from between the finger tips. The tick(s) should be dropped into a small container of 70% ethanol (isopropyl alcohol will work in a pinch) for later identification. It is important to record the exact location and date the host animal was collected along with the host species and the collector's name. Ticks from different hosts/localities should not be mixed together in the same container.

Herpetological Tours

Join Bill Lamar and Louis Porras
for eight herp-filled days in
Peru or Costa Rica



GREEN TRACKS

For more information contact: **Green Tracks, Inc.**,
P.O. Box 5299, Tyler TX 75712-5299, phone (903)
593-7170

Preserved specimens can be sent to K.S. Matz, Department of Biology, University of Utah, Salt Lake City, Utah 84112. These will be forwarded to CID in Colorado for identification.

Submitted by **K.S. Matz**, address listed above.

KEY TO THE AMPHIBIANS OF UTAH

Salamanders

Only one species of salamander is known from Utah, ***Ambystoma tigrinum* (Tiger Salamander)**. It can be identified by the following characteristics: Lacks scales and claws; has soft moist skin; and vomerine teeth form a line across the roof of the mouth, beneath the eyes. Adults have robust body and legs and distinct costal grooves. Coloration varies considerably, but typically consists of a dark olive to brown background with lighter reticulations, blotches, bars, or spots. In some areas of Utah they are black with yellow markings. Larvae have: external gills; may have less developed legs; and are often unicolor or lighter than adults. Two subspecies are reported to occur in Utah, *A. t. nebulosum* (Arizona Tiger Salamander) and *A. t. melanostictum* (Blotched Tiger Salamander). The subspecies are largely defined by coloration, and it is not uncommon to find individuals fitting two or more subspecies definitions in a single pond. In addition, other subspecies have been released by fishermen which makes identification of subspecies difficult at best. It is probably safest to refer to these salamanders simply as *Ambystoma tigrinum*.

Frogs and Toads

Adults:

- 1a. Parotoid glands present; skin texture generally glandular or warty..... *Bufo*..... 2
1b. Parotoid glands absent; skin either smooth or with small bumps but not warty 6

- 2a. Prominent cranial crests..... 3
 2b. Cranial crests weak or absent 4
 3a. Cranial crests extend between and behind eyes and form an 'L'- shape; parotoids elongate; statewide except Daggett, Rich, and Summit Counties and the Salt Flats area of northwestern Utah..... *Bufo woodhousii woodhousii* (Woodhouse's Toad)
 3b. Cranial crests extend between eyes in a 'V'- shape; parotoids ovoid; dorsal blotches often paired; southeastern Utah *Bufo cognatus* (Great Plains Toad)
 4a. Distinct light-colored dorsal stripe extending the entire length of the back; distinct fold of skin on inner side of hind feet (tarsal fold); venter usually spotted; Uinta and the central mountains of Utah *Bufo boreas boreas* (Boreal Toad)
 4b. Dorsal stripe either absent or not distinct or extending the entire length of the back; tarsal fold absent or indistinct; venter usually immaculate or nearly so 5
 5a. Parotoids round; upper jaw distinctly light colored; bottom of hind feet yellowish, without darken tubercles; southern to central eastern Utah *Bufo punctatus* (Red-Spotted Toad)
 5b. Parotoids ovoid and smooth; upper jaw color not distinctly different from adjacent areas; bottom of hind feet with darkened tubercles; often a pale mark on each sacral hump; southwestern Utah *Bufo microscaphus microscaphus* (Arizona Toad)
 6a. Pupil vertical; shiny, black spade on underside of hind foot *Scaphiopus* (= *Spea*) 7
 6b. Pupil horizontal to round; no black spade on underside of hind foot 9
 7a. Boss between eyes; spade wedge-shaped; iris not copper-colored 8
 7b. No boss between eyes; spade elongate and rectangular; Iris copper-colored; east of the Colorado River
 ..*Scaphiopus multiplicatus* (New Mexico Spadefoot)
 8a. Boss between eyes bony; southeastern Utah primarily south of the San Juan River..... *Scaphiopus bombifrons* (Plains Spadefoot)
 8b. Boss between eyes glandular; statewide except southeastern Utah, west of the Colorado River.....
Scaphiopus intermontanus (Great Basin Spadefoot)
 9a. Distinct toe pads; (may be small in *Pseudacris regilla*) .. 10
 9b. Toes without distinct toe pads 11
 10a. Dark eyestripe; toe pads small; extreme northwestern Utah..... *Pseudacris* (= *Hyla*) *regilla* (Pacific Chorus Frog)
 10b. Lacks distinct eyestripe; toe pads large; southern to central eastern Utah..... *Hyla arenicolor* (Canyon Treefrog)
 11a. Dorsolateral folds present, at least anteriorly 13
 11b. No dorsolateral folds present 12
 12a. Upper jaw white; dark eyestripe present; no fold extending from eye and around tympanum; size small (1 1/2 inches or less); Uinta Mountains and the mountains through central Utah from Idaho to about Zion National Park..... *Pseudacris triseriata* (Western Chorus Frog)
 12b. Upper jaw green to brown; no eyestripe; fold extending from eye and around tympanum; size large (3 1/2 - 8 inches); Introduced throughout the state..... *Rana catesbeiana* (Bullfrog)
 13a. Supralabial stripe absent or diffuse anterior to eye..... 14
 13b. Light supralabial stripe extends to snout or nearly so 16
 14a. Tympanum as large or larger than eye; fold around back of tympanum; distinct light spot in center of tympanum Introduced in Weber County..... *Rana clamitans melanota* (Green Frog)
 14b. Tympanum smaller than eye; no fold around back of tympanum; tympanum without distinct center spot..... 15
 15a. Dorsolateral folds ending before groin; southwestern Washington County... *Rana onca* (Relict Leopard Frog)*

- 15b. Dorsolateral folds interrupted and displaced medially in sacral region; southwestern Washington County
Rana yavapaiensis (Lowland Leopard Frog)*
 16a. Spots on back without distinct borders; usually yellowish below, especially in groin area; occurs in central Utah and in the west desert *Rana pretiosa* (Spotted Frog)
 16b. Spots on back with distinct pale borders; usually cream to white below; statewide..... *Rana pipiens* (Northern Leopard Frog)

* Based on the distinguishing characteristics, distribution, and the lack of data on *Rana onca* and *Rana yavapaiensis*, I believe these two species may actually be one in the same.

Submitted by **Breck Bartholomew**, 195 West 200 North, Logan, UT 84321-3905

CAPTIVE CARE

Natural Sources of Calcium for Day Geckos

I have two Gold-Dust Day Geckos (*Phelsuma laticauda*) and all the literature I've read says they need lots of supplemented calcium. Okay, but in the wild, what do they eat that has so much calcium?
 - B. Hainsworth

In the wild, *Phelsuma* eat a variety of arthropods as well as pollen, nectar and fruit. They probably get their calcium from the variety of food eaten rather than from a specific source. In captivity, day geckos are usually fed crickets, meal or wax worms, bananas, and baby food, none of which contains enough vitamins and minerals to sustain healthy animals.

Whenever there is a deficiency in the calcium and/or vitamin D or an imbalance in the calcium to phosphorus ratio in the diet, the animal is prone to metabolic bone disease (Mader 1990). Often animals with metabolic bone disease appear healthy and robust because the bones become spongy and swollen. Eventually, the animal becomes immobile, stops eating, and dies.

It is recommended that day geckos receive a 2:1 ratio of calcium to phosphorus which is then mixed 1:1 with a vitamin supplement (Tytel 1990). Tytel (1990) recommends "Superpreen" (RHB labs, Inc.), a powdered avian vitamin-mineral supplement.

Sean McKewn has just finished a book on the captive care of day geckos which is due to be available soon. I'll let you know when I hear more about this book.

Literature cited

Mader, Douglas R. 1990. Metabolic bone disease in captive reptiles. *Vivarium*. 2(3): 12-14.

Tytel, Tim. 1990. Day Geckos: *Phelsuma*. *Vivarium*. 2(5):15-19;29.



CAPTIVE HERP INVENTORY

Anyone keeping live reptiles and amphibians is asked to contribute to the annual inventory of captive amphibians and reptiles. Please submit the following information current January 1st of this year.

1. A complete inventory of all reptiles and amphibians living in your collection as of January 1. Sexes of adult animals should be included and listed male (1.0.0) female (0.1.0) and unknown (0.0.1). Juvenile animals should be listed using the same format. For example, 1.2.1 + 0.0.10 would read 1 adult male, 2 adult females, 1 adult of unknown sex, and 10 juveniles of unknown sex.

2. A list of all species bred during the previous year. Information may be sparse with simply an indication that the taxon was bred during the year, or it may be quite lengthy including, but not limited to: dates of copulation, dates of egg laying and hatching, types of substrates and temperature used during incubation, light cycles, hibernation, etc. Any type of valuable information up to three or four paragraphs may be used.

3. A list of all specimens in your collection which you believe may set longevity records for the species. List the date of acquisition, your specimen I.D. number, the sex, estimated age at capture, wild or captive bred, living or dead, and any brief notes you wish to add.

4. A list of any publication (including books, museum bulletins, journals, magazines, etc.) with reference to reproduction of captive reptiles and amphibians.

5. Please be sure to list your name, address and telephone number(s) as you want them listed.

All information should be sent to: Frank L. Slavens, P.O. Box 30744, Seattle, WA 98103.

Frank sells the complete inventory in book form each year. Contact him for more information.

HERPETOLOGICAL NOTES

SNAKES REACH GREAT HEIGHTS IN SURVIVING FLOOD

By Barry Burkhardt

Reprinted from The Desert Monitor. 23(2):10-11.

Randy Babb and two companions were maneuvering a boat through flooded tamarisk trees on a bulging Painted Rock Reservoir when they came upon a sight Babb would later describe as "amazing."

"It was unbelievable," said Babb, an Arizona Game and Fish department employee who recently began surveying the flood's impact. "Suddenly, we saw two diamondbacks on a branch. Just above them were two coachwhips. Then you looked into the crook of the tree and there was a whole ball of snakes, all different kinds."

"You look and say, 'There's a snake.' Then there's another and another. You suddenly realize there are snakes everywhere."

People aren't the only ones suffering from rising water at Painted Rock Reservoir, which stretches 20 miles from northwest of Gila Bend almost to Buckeye. Wildlife is taking a beating, too.

When the normally dry reservoir rose rapidly, the desert area's animals and reptiles headed for the highest points possible - mainly to the trees and bushes. Many didn't make it. Their failure was visible everywhere.

The most impressive sights, though, were the balls and stacks of snakes. Rattlesnakes, kingsnakes, gopher snakes, coachwhips - you name the snake, and it was up a tree. Kingsnakes eat other snakes, but on this day, they were clinging to tree branches, trying to survive.

On his first trip out, Bruse Taubert, who directs the Wildlife Division for Game and Fish, and wildlife manager Bill Brandel rescued about 170 snakes and released them elsewhere.

Randy Babb, Jim Wamecke of Game and Fish, and Mary Gilbert, a biologist for U.S. Bureau of Land Management, captured 112 snakes in 3 1/2 hours.

"On our second trip, we had one snake box completely filled with rattlesnakes," Gilbert said, "We had to quit we had so many."

Western diamondbacks and Mojaves were the most numerous, Babb said. All were quick to point out that the snakes were released far from human habitation.

Also, Taubert and Brandel captured several road runners by chasing them out of trees into water. The birds were caged and released out of harm's way.

Babb, who is particularly interested in snakes and reptiles, was curious about the fate of small snakes, such as the black-headed snake. He found one drowned.

"I think most of the small snakes and reptiles probably died," Babb said. "Small snakes and reptiles don't swim well. That water was so cold, they probably suffered from hypothermia and drowned. The larger snakes will ultimately try to swim to safety or starve."

He said the desert area's rodent population was especially hit hard. Large numbers of various species of mice and rats drowned.

"They don't adjust their body heat well, anyway," Babb said. "I doubt many at all survived the cold water."

A number of cottontailed rabbits are trapped on islands and probably will starve.

When the reservoir goes down, Babb expects a wasteland.

"We took some snakes out of the tops of 200-year-old saguaros," he said. "Their root system drowns in just a few hours. We'll lose all those. We'll lose mesquite and ironwood, too."

QUALITY CAPTIVE BORN COLUBRIDS

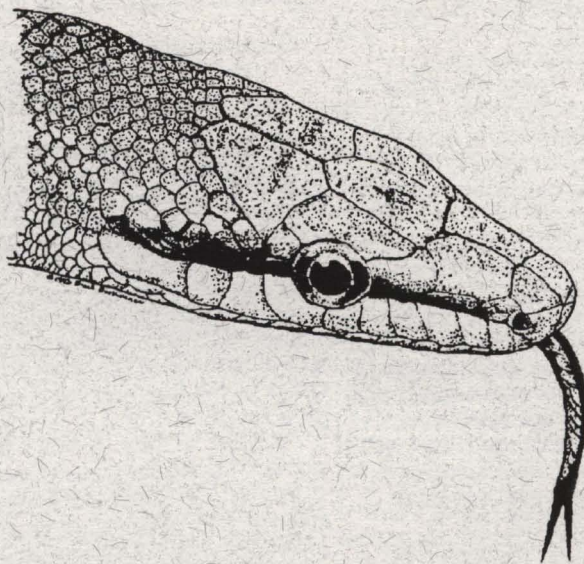


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UTAH MEETING:

No meeting this month.



Gonyosoma oxycephala

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- **Vasco Tanner's Gartersnake** - *T. elegans*
vascotanneri
- **Valley Garter Snake** - *T. sirtalis fitchi*
- **Regal Ringneck Snake** - *Diadophis*
punctatus regalis
- **Red Coachwhip** - *Masticophis flagellum*
piceus
- **Desert Striped Whipsnake** - *M. t. taeniatus*
- **Western Yellowbelly Racer** - *Coluber*
constrictor mormon
- **Smooth Green Snake** - *Opheodrys vernalis*
- **Western Leafnose Snake***** -
Phyllorhynchus decurtatus perkinsi
- **Mojave Patchnose snake** - *Salvadora*
hexalepis mojaviensis
- **Desert Glossy Snake** - *Arizona elegans*
eburnata
- **Painted Desert Glossy Snake** - *A. e.*
philipi
- **Great Plains Ratsnake** - *Elaphe guttata*
emoryi
- **Great Basin Gopher Snake** - *Pituophis*
melanoleucus deserticola
- **California Kingsnake** - *Lampropeltis getula*
californiae
- **Utah Mountain Kingsnake** - *L. pyromelana*
infralabialis
- **Utah Milk Snake** - *L. triangulum taylori*
- **Western Longnose Snake** - *Rhinocheilus l.*
lecontei
- **Ground Snake** - *Sonora semiannulata*
- **Desert Night Snake** - *Hypsiglena torquata*
deserticola
- **Mesa Verde Night Snake** - *H. t. loreala*

- **Spotted Night Snake** - *H. t. ochrorhynchus*
- **Southwestern Blackhead Snake** - *Tantilla*
hobartsmithi
- **Sonoran Lyre Snake** - *Trimorphodon*
biscutatus lambda
- **Mojave Desert Sidewinder** - *Crotalus c.*
cerastes
- **Southwestern Speckled Rattlesnake** - *C.*
mitchellii pyrrhus
- **Mojave Rattlesnake** - *C. s. scutulatus*
- **Midget Faded Rattlesnake** - *C. viridis*
concolor
- **Great Basin Rattlesnake** - *C. v. lutosus*
- **Hopi Rattlesnake***** - *C. nuntius*
- **Prairie Rattlesnake** - *C. v. viridis*

* Introduced species

** Probably extinct

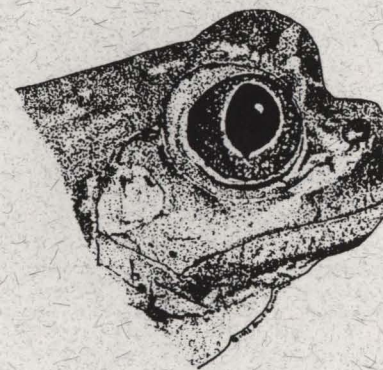
*** suspected to occur in Utah



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CHECKLIST OF THE AMPHIBIANS & REPTILES OF UTAH



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Amphibians

Salamanders

- **Arizona Tiger Salamander** - *Ambystoma tigrinum nebulosum*
- **Blotched Tiger Salamander** - *A. t. melanostictum*

Frogs & Toads

- **Boreal Toad** - *Bufo b. boreas*
- **Great Plains Toad** - *B. cognatus*
- **Arizona Toad** - *B. m. microscaphus*
- **Red-spotted Toad** *B. punctatus*
- **Woodhouse's Toad** - *B. w. woodhousii*
- **Plains Spadefoot** - *Scaphiopus bombifrons*
- **Great Basin Spadefoot** - *S. intermontanus*
- **New Mexico Spadefoot** - *S. multiplicatus*
- **Canyon Treefrog** - *Hyla arenicolor*
- **Pacific Treefrog** - *Pseudacris regilla*
- **Western Chorus Frog** - *P. triseriata*
- **Bullfrog*** - *Rana Catesbeiana*
- **Green Frog*** - *R. clamitans*
- **Relict Leopard Frog**** - *R. onca*
- **Northern Leopard Frog** - *R. pipiens*
- **Spotted Frog** - *R. pretiosa*
- **Lowland Leopard Frog** - *R. yavapaiensis*

Reptiles

Turtles

- **Texas Spiny Softshell*** - *Apalone spinifera emoryi*
- **Common Snapping Turtle*** - *Chelydra s. serpentina*

- **Western Painted Turtle*** - *Chrysemys picta belli*

- **Desert Tortoise** - *Gopherus agassizii*

Lizards

- **Utah Banded Gecko** - *Coleonyx variegatus utahensis*
- **Utah Night Lizard** - *Xantusia vigilis utahensis*
- **Desert Night Lizard** - *X. v. vigilis*
- **Northern Whiptail** - *Cnemidophorus tigris septentrionalis*
- **Great Basin Whiptail** - *C. t. tigris*
- **Plateau Striped Whiptail** - *C. velox*
- **Variable Skink** - *Eumeces multivirgatus epipleurotus*
- **Great Basin Skink** - *E. skiltonianus utahensis*
- **Mojave Black-collard Lizard** - *Crotaphytus bicinctores*
- **Yellowhead Collard Lizard** - *C. collaris auriceps*
- **Pale Leopard Lizard** - *Gambelia wislizenii punctata*
- **Longnose Leopard Lizard** - *G. w. wislizenii*
- **Desert Iguana** - *Dipsosaurus d. dorsalis*
- **Glen Canyon Chuckwalla** - *Sauromalus obesus multiforaminatus*
- **Western Chuckwalla** - *S. o. obesus*
- **Mojave Zebratail Lizard** - *Callisaurus draconoides rhodostictus*
- **Speckled Earless Lizard** - *Holbrookia maculata approximans*
- **Eastern Short-horned Lizard** - *Phrynosoma douglassii brevirostre*

- **Mountain Short-horned Lizard** - *P. d. hemandesi*

- **Salt Lake Short-horned Lizard** - *P. d. ornatum*

- **Southern Desert Horned Lizard** - *P. platyrhinos calidiarum*

- **Northern Desert Horned Lizard** - *P. p. platyrhinos*

- **Northern Sagebrush Lizard** - *Sceloporus g. graciosus*

- **Orangehead Spiny Lizard** - *S. magister cephaloflavus*

- **Yellowback Spiny Lizard** - *S. m. uniformis*

- **Great Basin Fence Lizard** - *S. occidentalis longipes*

- **Northern Plateau Lizard** - *S. undulatus elongatus*

- **Northern Tree Lizard** - *Urosaurus ornatus wrighti*

- **Northern Side-blotched Lizard** - *Uta s. stansburiana*

- **Desert Side-blotched Lizard** - *U. s. stejnegeri*

- **Colorado Side-blotched Lizard** - *U. s. uniformis*

- **Banded Gila Monster** - *Heloderma suspectum cinctum*

Snakes

- **Utah Blind Snake** - *Leptotyphlops humilis utahensis*

- **Rubber Boa** - *Charina bottae*

- **Western Blackneck Garter Snake** - *Thamnophis c. cyrtopsis*

- **Wandering Gartersnake** - *T. elegans vagrans*